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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,445	04/18/2000	William Bellis Somers	600.1048	2279
23280	7590	05/17/2004	EXAMINER	
DAVIDSON, DAVIDSON & KAPPEL, LLC			TAWFIK, SAMEH	
485 SEVENTH AVENUE, 14TH FLOOR			ART UNIT	
NEW YORK, NY 10018			PAPER NUMBER	

3721

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/551,445	Applicant(s) SOMERS ET AL.	
	Examiner Sameh H. Tawfik	Art Unit 3721	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 15) <input type="checkbox"/> Notice of References Cited (PTO-892) | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 20) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The formal drawings were received on 3/29/2004. These drawings are accepted by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6-11, and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roettger et al. (5,201,701).

Roettger discloses a folding cylinder comprising a frame having a work side support (Fig. 2; via side frame 8) and a gear side support (Fig. 2, via side frame 9 holds gears 24 and 49); at least one expansion segment (Fig. 2; via segments 18 and 19) for providing an effective diameter of the cylinder (Figs. 3 and Abstract, lines 2 and 3); the expansion segment (18 and 19) being located between the work side support (8) and the gear side support (9) and spaced apart from at least one of the work side support and the gear side support, see for example (Fig. 2); the expansion segment (18) being movable so as to be non-evenly depressible over a width of the expansion segment (column 3, lines 25-27; via by changing the position of the segment same as moving the segment); and an actuating device (Fig. 2; via spindle 20) for contacting the at least one expansion segment (18 and 19) and setting the effective diameter (column 4, lines 25-29).

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Note that it is obvious by changing the position of the segment 18 to change the diameter of the cylinder, non-evenly depressible over the width of the segment will take a place.

Regarding claim 2: at least one expansion segment (18 and 19) is spaced apart from both the work side support (8) and the gear side support (9), see for example (Fig. 2).

Regarding claim 3: the expansion segment (18 and 19) includes an outer section (via 18) and a plurality of J-shaped brackets (Fig. 2, via 19) connected to the outer section (18), a first J-bracket being spaced apart from the work side support (8) and a second J-bracket being spaced apart from the gear side support (9), see for example (Fig. 2).

Regarding to claim 4: wherein an end of the J-shaped brackets (19) located opposite the outer section (18) interacts with eccentrics on a camshaft (via 20), a rotational angle of the camshaft being adjustable (column 4, lines 25-29).

Regarding claim 11: the cylinder (2) is a pin cylinder of a cross folder (Figs. 1 and 3).

Regarding claims 6-10 and 15-17: Roettger does not specifically disclose the use of foam pieces in different portions of the apparatus for example a foam piece in a space between the expansion segment and the at least one of the gear side and work side supports, foam pieces between the expansion segment and the work side support and between the expansion segment and the gear side support, a foam piece attached to a side of the first J-bracket, a foam piece covers the side of the J-bracket, nor friction-reducing coating on the foam piece and adhesive on the opposite side of the friction reduction surface. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Roettger's folding cylinder by having foam pieces with friction-reducing coating and adhesive on the opposite side of the friction reduction surface in different areas of the apparatus, as a matter of

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engineering design choice, since the examiner takes an official notice that using foam pieces in between parts of the apparatus is old, well known, and available in the art in order to reduce friction and noise.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roettger et al. (5,201,701) in view of Fischer (5,039,076).

Roettger does not disclose that a plurality of springs on a tie support. However, Fischer discloses a similar folding cylinder comprising a plurality of springs (Fig. 2, via springs 16) on a tie support (Fig. 2, via pin 11).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted Roettger's apindel 20 by having a plurality of springs on a tie support, as suggested by Fischer, in order to provide simple and sturdy cylinder (column 2, lines 5-12).

Regarding claim 15: Roettger discloses an actuating device for contacting the at least one expansion segment (18) and setting the effective diameter (Figs. 2 and 3; via motor 30 and spindle 20; column 4, lines 27-30 and 34 and 35).

Response to Arguments

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is (703) 308-2809. The examiner can normally be reached on Tuesday - Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (703) 308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ST.


EUGENE KIM
PRIMARY EXAMINER